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BEFORE THE PUBLIC UTILITIES COMMISSION
AND THE ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emission Standards into Procurement Policies.	Rulemaking 06-04-009 (Filed April 13, 2006)
Order Instituting Informational Proceeding – AB 32.	CEC Docket No. 07-OIIP-01

SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY REPLY COMMENT ON POINT OF REGULATION ISSUES

Norman A. Pedersen, Esq.
HANNA AND MORTON LLP
444 South Flower Street, Suite 1500
Los Angeles, California 90071-2916
Telephone: (213) 430-2510
Facsimile: (213) 623-3379
E-mail: *npedersen@hanmor.com*

Attorney for the **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY**

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In accordance with Administrative Law Judge's Ruling Requesting Comments on Type and Point of Regulation Issues ("POR Ruling") issued on November 9, 2007, in the captioned proceeding and the Administrative Law Judges' Ruling Extending Comment Deadlines and Addressing Procedural Matters issued on November 30, 2007, the Southern California Public Power Authority ("SCPPA") respectfully submits this reply comment. In accordance with the POR Ruling, this reply comment is being submitted simultaneously to both the California Public Utilities Commission ("CPUC") and the California Energy Commission ("CEC") (jointly, "Commissions").

Twenty four opening comments were filed on December 3, 2007. Several of the commenting parties specifically addressed three options that were raised in the POR Ruling for implementing greenhouse gas ("GHG") regulation in the electricity sector if "a California-only

cap-and-trade system would not be implemented for the electric sector at this time." POR Ruling at 8. In this reply comment, SCPPA responds to the comments on the three options that were presented in the POR Ruling for implementing a GHG regulatory structure for the electricity sector if trading would be deferred. Also, SCPPA addresses criticisms of the "load-based" approach in which regulated retail providers would be the point of regulation in the electricity sector, and SCPPA comments on criticisms of a paper by Resero Consulting on the "first-seller' approach to establishing a point of regulation for the electricity sector.

I. RESPONSE TO COMMENTS ON THREE OPTIONS FOR DEFERRING A CAP-AND-TRADE PROGRAM FOR THE ELECTRICITY SECTOR.

In the POR Ruling, the Commissions presented a scenario in which a California-only cap-and-trade system would not be implemented for the electricity sector at this time:

> Instead, California would work with other Western states to develop a Western Climate Initiative cap-and-trade system and/or work toward a national cap-and-trade program. In the meantime, existing policies and programs in the electricity sector may need to be ramped up to meet the AB 32 goals.

POR Ruling at 8. The POR Ruling specifically posed "several variations" for how implementing a cap-and-trade system could be deferred while still undertaking GHG regulation for the electricity sector to meet AB 32 goals:

(1) Develop a load-based cap for retail providers with "an assignment of individual entity obligations" and with "trading available within the California electricity sector only, but not with other sectors." *Ibid*.

(2) Develop "individual entity caps (or carbon budgets) which entities could not exceed without facing penalties or fees, but not allow for any trading of allowances at this time." *Ibid*.

(3) "Ramp up the mandatory levels of existing programs such as the energy efficiency and RPS programs to higher goals, and make all retail providers obligated to meet these additional goals, without assigning specific cap levels to individual entities." *Ibid*.

The opening comment submitted by the Natural Resources Defense Counsel and the Union of Concerned Scientists (jointly, "NRDC") contains the most comprehensive evaluation of Options (1) through (3). SCPPA responds now to the assessment by NRDC as well as to the occasional comments by various other parties on the options.

For all three options, NRDC assumed that the term "individual entities" as used in the POR Ruling referred to retail providers. SCPPA believes that assumption about what was meant by "individual entities" in the POR Ruling is correct, given the context in which the three options were raised in the POR Ruling.

In summary, SCPPA continues to support a GHG regulatory program for the electric sector in which regulated retail providers would be the point of regulation and GHG emission allowances would be allocated to the retail providers for the benefit of the retail providers' customers, with the allocation of allowances being based upon recent pre-AB 32 actually experienced emissions and with the amount of allowances that are allocated to each retail provider for each successive compliance period being reduced proportionately over time as necessary to achieve the AB 32 reduction goals as eventually established by the California Air Resources Board ("CARB") for the electric sector and for each retail provider by 2020. SCPPA also supports consideration of the "flexible compliance mechanisms" that were envisioned by the CPUC in Decision ("D.")06-02-032, including allowance trading, banking, borrowing, and, to an appropriately limited extent, offsets, and SCPPA recommends consideration of a "safety valve" that would provide a check on exorbitant allowance prices.

However, with caveats as discussed below, SCPPA could also support each of the three options for deferring trading as presented in the POR Ruling.

A. Option 1: Develop a Load-Based Cap for Retail Providers with "An Assignment of Individual Entity Obligations" and with Trading Being Available Within the California Electricity Sector Only, But Not with Other Sectors.

Option 1 is basically what SCPPA has recommended in this proceeding but with the trading of allowances being limited to California electricity retail providers. NRDC criticizes Option 1 on the basis that "restricted trading could lessen the cost reductions that could be achieved with full trading with other sectors." NRDC Opening Comment at 28. Beyond that, NRDC's critique of Option 1 parallels its assessment of the load-based approach generally.

NRDC is correct that Option 1 would tend to diminish the potential for cost minimization that might be realized if trading were permitted in a broader and, hence, more liquid secondary market for allowances. However, the potential reduction of the cost minimization potential of trading could be mitigated by adopting alternative flexible compliance mechanisms such as banking, borrowing, and offsets.

There is a more significant downside to limiting the secondary market for trading allowances. To the extent to which the secondary market for trading allowances would be limited to California electricity retail providers, the market would become correspondingly less liquid and more susceptible to the potential for exercising market power. The Los Angeles Department of Water and Power ("LADWP") expressed a concern in its opening comment about "market manipulation and gaming in emission trading." LADWP Opening Comment at 10. The CPUC shares LADWP's concern. In considering allowance trading among load-serving entities ("LSEs") that are subject to CPUC jurisdiction as would occur under the program envisioned by the CPUC in D.06-02-032, the CPUC observed that "an auction with so few

buyers (as would be the case with a load-based cap for LSEs under CPUC jurisdiction) would be economically inefficient and prone to market power abuses." D.06-02-032 at 42.

A market that would be limited to California retail providers would be exposed to the "potential for exercising market power in an emissions trading program" that concerned both LADWP and the CPUC. Thus, not only would adoption of Option 1 heighten the importance of alternative flexible compliance mechanisms such as banking, borrowing, and offsets to balance the reduced potential for minimizing costs through trading. There would also be a heightened need to consider effective "safety valves" to protect against excessive allowance prices. *See* SCPPA Opening Comment at 40-41.

With a heightened focus on the need for alternative flexible compliance mechanisms and on having a "safety valve," SCPPA could support Option 1 as an acceptable modification of its primary proposal in this proceeding.

B. Option 2: Develop "Individual Entity Caps (or Carbon Budgets) Which Entities Could Not Exceed Without Facing Penalties or Fees, But Not Allow for Any Trading of Allowances at This Time."

Option 2 is essentially the same as Option 1 except that instead of having a smaller, less liquid secondary market for trading allowances, there would be *no* market for trading allowances. NRDC's criticism of Option 2 is the same as for Option 1: "Elimination of trading could result in fewer cost-effective reductions than would otherwise be achieved with trading." NRDC Opening Comment at 29.

Option 1 heightens the importance of considering flexible compliance mechanisms such as banking, borrowing, and offsets. Option 2 heightens yet further the need for the Commissions and CARB to consider alternative flexible compliance mechanisms. Even more liberal banking, borrowing, and offsets should be permitted under Option 2 than under Option 1 to counterbalance the complete elimination of trading as a cost minimization strategy.

Option 2 would eliminate, however, the possibility for the exercise of market power or manipulation in a thin market for allowances. There would be *no* market for allowances under Option 2.

Insofar as Option 2, like Option 1, tracks the model that SCPPA has consistently recommended in this proceeding as a regulatory scheme for the electricity sector, SCPPA could support Option 2 as well as Option 1, provided that appropriate consideration would be given to adoption of liberalized alternative flexible compliance mechanisms such as banking, borrowing, and offsets.

C. Option 3: Ramp Up the Mandatory Levels of Existing Programs Such as the Energy Efficiency and RPS Programs to Higher Goals, and Make all Retail Providers Obligated to Meet These Additional Goals, Without Assigning Specific Cap Levels to Individual Entities.

NRDC gives Option 3 high marks on many points. "The relative legal risk of [Option 3] being delayed or overturned is extremely low." NRDC Opening Comment at 29. Option 3 ranks "high" for administrative simplicity insofar as "this approach is most similar to the status quo." *Ibid* at 30. Option 3 is the "most compatible without question" with wholesale markets and the California Independent System Operator ("CAISO") Market Restructuring and Technology Update ("MRTU"). NRDC recognizes that Option 3 would not have any "expandability" for a broader cap-and-trade program insofar as Option 3 would not include trading, but a "ramp up of existing programs and policies could serve as a model for complementary policies to a federal cap-and-trade program." *Ibid*.

Also, Option 3 would be consistent with how NRDC believes most GHG emission reductions would be achieved. In NRDC's view, most emission reductions will be achieved programmatically through "energy efficiency programs, building and appliance efficiency standards, the renewable portfolio standard (RPS), generation emissions performance standard

(SB 1368), etc." NRDC Opening Comment at 3. NRDC expects "a cap-and-trade program to provide a relatively small portion of the overall emissions reductions needed to meet the 2020 limit…." *Ibid*. Option 3 would involve an expansion the programs that NRDC believes will provide most of the GHG emissions reductions.

Nevertheless, NRDC has some problems with Option 3. The problems are not overwhelming.

1. Evaluation of Problems Perceived by NRDC with Deferring Cap-and-Trade Under Option 3.

NRDC perceived three problems with deferring cap-and-trade under Option 3. **First**, in NRDC's view, a "cap-and-trade [program] complements regulatory programs to reduce emissions even further than the programs alone can." *Ibid* at 29. This function would be lost under Option 3.

It appears that the primary means by which allowance trading would reduce "emissions even lower than can be achieved through regulatory programs [such as energy efficiency] alone" in NRDC's view would be by "creating a price signal":

> A cap-and-trade program creates a price signal so that businesses attribute a cost (whether an out-of-pocket cost or an opportunity cost) to every ton of GHGs emitted, and adjust their business practices accordingly. As economists would say, it "internalizes an externality."

Ibid at 4. However, "internalizing" costs so as to increase the price of electricity should not be the objective of an AB 32 program.

The cost of "internalizing" the value of GHG emission allowances in the wholesale price of electricity could be very high. For example, as SCPPA noted in its Opening Comment, an Electric Power Research Institute ("EPRI") study found that imposing an emission allowance of $50 per ton on generators could more than *double* the wholesale price of electricity while

reducing emissions in the Midwest by only 4 percent. "The Change in Profit Climate," Victor Neimeyer ("EPRI"), Public Utilities Fortnightly at 26 (May, 2007); *see* SCPPA Opening Comment at 30. NRDC itself recognizes that the "pure source-based cap-and-trade" approach, the "deliverer/first-seller cap-and-trade" approach, and the hybrid cap-and-trade approach are "inferior to a load-based approach in minimizing total costs to consumers" due to the fact that they would "internalize" the cost of GHG emission allowances in the wholesale price of electricity.

The Legislature intended that the AB 32 program should be aimed at achieving GHG reduction goals through regulations that would "minimize costs…." *See* Cal. H & S § 38562(b)(2). The Commission and CARB should not be concerned about losing the opportunity to "create a price signal" under Option 3. In fact, as discussed below, that is a *benefit* of Option 3.

Second, NRDC is concerned that omitting a cap on overall statewide emissions or overall electric sector emissions would diminish certainty of AB 32 goal attainment: "A cap provides certainty of goal attainment…." *Ibid* at 29. However, even if a cap-and-trade program is adopted, there will be a degree of flexibility in attaining AB 32 goals. Cal. H & S § 38599 provides for flexibility in attaining the AB 32 goal "in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm…."

Furthermore, as an additional feature, safety valves should be a feature of a cap-and-trade program. *See* SCPPA Opening Comment at 40-41.

Third, NRDC contends that "a cap-and-trade [program] could help lower overall costs," implying that by omitting any trading feature, an opportunity to minimize costs would be lost under Option 3. SCPPA concurs that trading could provide cost containment benefits. However,

the loss of the availability of trading should be weighed against the positive features of Option 3 as identified by NRDC such as low legal risk, high accuracy, high simplicity, and high compatibility with wholesale markets in the MRTU. Additionally, there are positive features that were not identified by NRDC.

2. Additional Positive Features of Option 3.

a. **Cost Minimization by Avoiding Impact on Wholesale Market.**

NRDC does not give credit to the fact that Option 3 would avoid the impact on wholesale electricity prices that would occur if a cap-and-trade program were instituted in tandem with a "pure" source-based, first-seller, or hybrid approach to point of regulation. As discussed above, internalizing the cost of allowances in the wholesale price of electricity would increase the cost of electricity for electric ratepayers. The adverse impact of internalizing the cost of allowances and allowance rents in wholesale prices would be avoided under Option 3.

Although the various programs that would be undertaken under Option 3 such as "ramped up" energy efficiency targets or renewable resource standards could result in retail provider customers incurring increased costs, in the long run these programs could prove to be cost-effective for ratepayers. The variable cost of fuel that would be incurred otherwise could be substantially reduced. For example, in evaluating the impact on average retail electricity prices of complying with a 25 percent renewable portfolio standard, the Energy Information Administration ("EIA") found that "annual consumer expenditures on electricity are very close to those in the "business as usual case through 2022, as the reduction in fuel prices caused by lower fossil fuel for electric power generation outweighs the increased capital costs of new or renewable generation capacity." *See* SCPPA Opening Brief at 30.

Some parties believe that the cost of GHG emissions should be included in the wholesale price of electricity to send a "price signal" to consumers. However, that was certainly not the

view of the Legislature. To the contrary, the Legislature mandated that the AB 32 regulatory program should be aimed at achieving the mandated GHG reduction goals through regulations that would "minimize costs…." Cal. H & S § 38562(b)(2); *see* SCPPA Opening Comment on Allowance Allocation Issues at 21-23 (October 31, 2007).

b. **Facilitating a Transition to a West-Wide or National Program.**

Option 3 could facilitate a transition to a west-wide or national cap-and-trade program. There has been an enormous change since the CPUC issued D.06-02-032 in February, 2006. In early 2006 the CPUC was concerned that "contract shuffling" would occur "until other states follow our lead." D.06-02-032 at 18-19. There was a sense that for a significant amount of time California would be isolated in its pursuit of GHG emission reduction. Now, as discussed in many of the opening comments, there is west-wide and national concern about GHG emissions, and there is a concomitantly increased prospect of a regional or even national program.

At the regional level, the Western Climate Action Initiative has been formed by the governors of Arizona, California, New Mexico, Oregon, Washington, and Utah and the premiers of British Columbia and Manitoba. The Western Climate Action Initiative will hold its first stakeholder workshop in Portland, Oregon, on Thursday, January 10, 2008, to begin work on designing a regional cap-and-trade program. At the national level, on December 5, 2007, United States Senator Boxer's Environment and Public Works Committee "marked up" and reported to the Senate the Lieberman-Warner bill, SB 2191, America's Climate Security Act of 2007. It is becoming increasingly clear that there will be a regional or national program by about the same time that the AB 32 regulatory program is to become operative, January 1, 2012. Cal. H & S § 38562(a).

LADWP observed in its opening comment: "Deferral of a cap-and-trade program may help facilitate California's integration into a regional or federal program by minimizing any

transitional difficulty that would otherwise arise if California's program structure was different from a federal program." LADWP Opening Comment at 23. For example, if California instituted a program that includes a cap-and-trade feature and an allocation of allowances, it may be difficult to integrate the California program into a west-wide or national program that allocates allowances or denominates allowances differently from the California program. Such integration issues can easily be eliminated by avoiding any allocation of allowances and avoiding any cap-and-trade feature prior to the implementation of a regional or national program. This would be accomplished by Option 3.

The value of deferring a cap-and-trade program to await a west-wide or national program has been recognized by various stakeholders beyond LADWP. For example, Pacific Gas and Electric Company ("PG&E") "believes the answer is yes, a national GHG system is likely to be in place in the same general time frame as implementation of AB 32…." PG&E Opening Comment at 1. A "programmatic implementation of AB 32 pending adoption of a national program" could be considered "for implementing AB 32 prior to the effective date of the national program." PG&E Opening Comment at 1-2.

Pursuing Option 3 does not mean that AB 32 would not be implemented. GHG emission reductions would be achieved, but they would be achieved without a cap-and-trade program being in place. For example, the Energy Producers and Users Coalition ("EPUC") point out:

> If regulators delay cap-and-trade implementation pending the development of regional/federal efforts, California can achieve significant emissions reductions if efforts are limited to expanding key programs. In particular, heavy reliance on CHP, solar, other renewabale resources and energy efficiency can together deliver an additional *annual savings* of roughly 40 MMT CO_2 e/year for investor-owned utilities:
>
> | | |
> |---|---|
> | Energy efficiency: | 15 $MMTCO_2$ Annual Savings |
> | California Solar Initiative | 3 $MMTCO_2$ Annual Savings |
> | Renewables: | 11 $MMTCO_2$ Annual Savings |

Combined Heat & Power 9-11 MMTCO$_2$ Annual Savings

EPUC Opening Comment at 11 (emphasis in original).

Southern California Edison Company ("SCE") expresses a concern that "if California elects to delay the development of a market-based program and implements additional programmatic solutions [i.e., Option 3], it is important that such programmatic solutions…include a sunset provision that protects California ratepayers from duplicative regulatory burdens." SCE Opening Comment at 14. That is incorrect. As NRDC points out, a cap-and-trade program complements and does not substitute for "energy efficiency programs, building and appliance efficiency standards, the renewable portfolio standard (RPS), [and] generation emissions performance standard…." NRDC Opening Comment at 3. Option 3 programs could continue after implementation of a regional or federal cap-and-trade program.

c. **Reduce Disputes and Build Consensus.**

Option 3 has the potential to reduce disputes and build consensus about implementing AB 32. For example, the investor owned utilities that are subject to the CPUC's jurisdiction are unified in their adamant opposition to being designated as electric sector points of regulation. *See* PG&E Opening Comment at 28-29; SCE Opening Comment at 18; San Diego Gas and Electric Company ("SDG&E") Opening Comment at 15. The basis for their opposition is transparent. The investor owned utilities have a fiduciary obligation to their shareholders. That fiduciary obligation compels them to reduce or avoid risk to their shareholders' investment. If the utilities were designated as being points of regulation, there would be a new regulatory risk for shareholders. Shareholders may be liable for all or some portion of obligations imposed upon the utilities as points of regulation. Penalties or some other costs may be imposed on shareholders.

Under Option 3, neither utilities nor generators would be designated as points of regulation. There would be no caps on emissions, penalties would not be assessed, and shareholder risk would be reduced or eliminated in comparison to other approaches that are being considered by the Commissions and CARB. Thus, Option 3 could reduce disputes and build consensus about AB 32 implementation.

3. Option 3 as Director Fitch's December 14, 2007 "5th Option".

It appears that the Commissions and CARB are actively considering Option 3. At the November 30, 2007 CARB "Scoping Plan Kick-Off Workshop", the CARB Staff proposed that an option for the electricity sector was to defer implementation of a cap-and-trade program "until [a] regional/national system is established" and to "rely on load-based programs for emission reductions" from the electric sector until the advent of a regional or national program. *See* Staff Presentation, Scoping Plan Kick-Off Workshop, Slide 34 (Nov. 30, 2007).

Subsequently, December 14, 2007, CARB convened a "Scoping Plan Sector Workshop" at which CPUC Director of Strategic Planning Julie Fitch summarized four point-of-regulation options under a cap-and-trade program: (1) load-based, (2) source-based, (3) first seller, and (4) hybrid in-state generator/import retail provider. Staff Presentation, Sector-Based Workshop--Energy Sectors, Slide 15 (Dec. 14, 2007). Director Fitch pointed out that "all four options have legal risks and policy pros and cons" but that "most legal risks and policy drawbacks [are] related to one state acting unilaterally." *Ibid* at Slide 16. Director Fitch observed: "If [a] regional or national system [is] developed, many vulnerabilities and challenges [are] solved." *Ibid*. Director Fitch proposed a "5th option: regional cap-and-trade system." *Ibid*.

Implementing Option 3 would be consistent with Director Fitch's "5th option" as presented at the December 14, 2007 CARB Workshop. The Commissions and CARB could "cut the Gordian knot" and resolve the conflict over which of the four options should be selected for

determining a point of regulation by electing to pursue Director Fitch's "5th Option," avoiding the point-of-regulation issue for now.

SCPPA continues to support the position that it presents in the introduction to this reply comment and that SCPPA has consistently presented in earlier filings in this proceeding. *See, e.g.,* SCPPA Opening Comment at 1-3. However, SCPPA recognizes the merits of Option 3. Particularly, SCPPA recognizes and is supportive of efforts by the Commissions and CARB to identify and move toward a compromise, consensus position that would resolve disputes about implementing AB 32 while being consistent with the GHG emission reduction mandate in AB 32.

II. THE CAISO MSC CRITICISMS OF THE "LOAD-BASED" APPROACH TO THE POINT OF REGULATION ARE ILL-FOUNDED AND SHOULD BE DISREGARDED.

The Market Surveillance Committee ("MSC") of the California Independent System Operator ("CAISO") submitted an "Opinion on Load-Based and Source-Based Trading of Carbon Dioxide in California" ("MAC Opinion") on December 3, 2007. The MSC joins various other parties in recommending that California defer trading under a cap-and-trade system: "The very likely advent of federal GHG regulation in the next few years means that there are advantages to deferring implementation of a formal trading system in California until the form of federal regulation becomes clear." MSC Opinion at 9.

In the view of the MSC, it does not matter whether the trading system is linked to a "load-based" approach to point of regulation or to a "primarily source-based" approach to point of regulation. The development of a formal trading system should be deferred "because California's dependency on imported power raises doubts about the environmental integrity of a California-only GHG trading system, [and] it is difficult to justify the cost of establishing a

sophisticated trading system (either load-based or primarily source-based) that might be abandoned quickly in the face of federal preemption." *Ibid*.

Although the conclusion of the MSC Opinion is that a trading system should be deferred "until the form of federal regulation becomes clear," the bulk of the MSC Opinion is directed to attacking the "load-based" approach to point of regulation. Unfortunately, the MSC Opinion is based upon mistaken assumptions and factual errors about the load-based approach in comparison to other approaches to point of regulation.

A. The MSC's Assessment of the Impact of the Load-Based Approach on Economic Dispatch in the CAISO's New Day-Ahead Market Rests on an Improper Assumption About California Policy.

The MSC contends that the load-based approach would discourage bidding into the CAISO's new MRTU day-ahead market that is to start operating in 2008 whereas a source-based approach would encourage participation. The MSC explains that to "maximize the benefits that market participants will receive from the integrated day-ahead market that will exist under MRTU, they must submit 'economic bids' to this market; that is, specific quantities of energy they want to buy or sell at specific prices rather than 'self-scheduling' all or the great majority of their energy by submitting only their desired quantities without prices." MSC Opinion at 7. The MSC contends that "the load-based approach will encourage self-scheduling in conflict with the efficiency potential of the MRTU markets, whereas the source-based approach will encourage economic bidding…." *Ibid*.[1] The implication is that if a load-based approach were adopted, CAISO market participants would engage in extensive self-scheduling and degrade the "efficiency of economic dispatch" of the new MRTU integrated day-ahead market, but if a source-based approach were adopted, economic dispatch would be maximized.

The MSC ignores the fact that regardless of whether a load-based approach or a source-based approach to a point of regulation were to be adopted, there are and will continue to be strong incentives for load-serving entities ("LSEs") to enter into long-term arrangements for generation resources which would then be "self-scheduled" into the new MRTU integrated day-ahead market. One California policy that will strongly encourage long-term arrangements for generation resources which will result in "self-scheduling" is California's renewable portfolio standard ("RPS"). Retail providers that are subject to an RPS will add renewable resources either by constructing and owning the resources themselves or by entering into long-term contracts for the resources. For retail providers that participate in the CAISO markets, the retail providers will self-schedule the renewable resources that they have either constructed themselves or have facilitated by entering into long-term contracts. Although, from the CAISO's standpoint, "self-scheduling" should be discouraged in order to enhance the efficiency of the new integrated day-ahead market, California's strong policy in favor of retail providers adding renewable resources will effectively encourage self-scheduling.

Other California policies encourage forward contracting instead of reliance upon purchases through the day-ahead market. Additionally, there are business incentives to self-scheduling order to avoid the risk associated with fluctuations in integrated day-ahead market prices and to avoid some of the overhead costs associated with the CAISO market. Retail providers that participate in the CAISO will use self-scheduling regardless of whether a load-based approach or a source-based approach were to be adopted for GHG regulatory purposes. Thus, the implication of the MSC that there would be a substantial difference in self-scheduling

[1] The MSC repeatedly compares the "load-based" approach to a pure source-based approach to establishing an electric sector point of regulation, ignoring the fact that a source-based approach to establishing a point of regulation for the electric sector would be unlawful under AB 32 insofar as "leakage" would be ignored.

if a load-based approach were to be adopted as opposed to a source-based approach is unfounded.

B. The MSC Misstates the Effect that the "Load-Based Approach" to Point of Regulation Would Have on the CAISO's Market For Ancillary Services.

In addition to contending that adoption of a load-based approach to point of regulation would have a negative effect on the new MRTU integrated day-ahead market, the MSC contends that the load-based approach would negatively affect the CAISO's ancillary services market. In order to make its point, the MSC presents an example:

> For instance, hydropower, which has zero GHG emissions, would likely be less willing to provide spinning reserve to the ISO because it would not want to earn the (relatively) low energy prices it would gain if it is dispatched in the ISO's markets, thereby giving up more lucrative "clean" energy prices in the bilateral market.

MSC Opinion at 8. MSC's hydropower example is misplaced. Hydropower resources do not provide ancillary services for the value of the energy that they would receive if called. Instead, hydropower resources provide ancillary services during hours when they generally do *not* flow energy. They bid to provide ancillary services on an "energy limited" or "contingency only" basis for periods when they will be able to provide capacity but will have little energy that will be available for scheduling. It is unclear that a hydroelectric resource would have any less incentive to bid into the CAISO's ancillary services market under a load-based approach to point of regulation than under a source-based approach to regulation.

C. The MSC Erroneously Characterizes the Load-Based Approach as Adversely Affecting the Ability of the Real-Time Market to Assure Reliable Service.

The MSC suggests that the ability of the CAISO's real-time market to assure reliable service would be adversely affected by a "load-based" approach to point of regulation. The MSC contends that under the load-based approach, fewer resources would be bid into the real-

time market. As a result, the "likelihood of scheduled curtailment would increase, as would the stress on system operators as they try to keep the system balanced." MSC Opinion at 8. The MSC conveniently elects to ignore the fact that, under the resource adequacy ("RA") requirements of the CPUC, LSEs are required to contract for 115 percent of peak load in RA capacity, and that capacity is mandated to participate in the CAISO's real-time market. As a result, a great majority of the resources of California retail providers that are members of the CAISO are required to offer capacity into the CAISO's real time market. Thus, it is false that adopting a load-based approach would have the sort of impact on reliability that is alleged by the MSC.

D. The MSC's Characterization of the Impact of the Load-Based Approach on the CAISO's Day-Ahead and Real-Time Markets is Purely Speculative and Unsupported by Any Attempt at Quantification.

The MSC's characterizations of the potential impact of the "load-based" approach to point of regulation as opposed to the source-based approach as CAISO markets, are purely speculative. During the November 27, 2007, teleconference in which the MSC voted to adopt the MSC Opinion, the MSC members acknowledged that they have not quantified any of the alleged impacts that the load-based approach would have on either the day-ahead or the real-time market. Indeed, the MSC members acknowledged that it may not be possible to precisely quantify the extent to which any of the alleged impacts would actually affect the day-ahead or real-time markets. Perhaps even more significantly, the MSC members acknowledged that many of the ways in which the load-based approach would allegedly influence the day-ahead or real-time markets would be secondary to other factors that have a more fundamental influence on those markets as discussed above.

E. The MSC's Attempt to Characterize the "Pure" Source-Based Approach as Being as Cost-Effective as the Load-Based Approach is Fallacious.

The MSC recognizes that implementation of a GHG trading system could result in the creation of "allowance rents," which the MSC defines as being "the allowance price times the number of allowances." MSC Opinion at 5. The MSC observes that "if allowances are given for free to generators," the value of the allowance rents "increases generator profits." *Ibid*.

The MSC admits, however, that the allowance rents are "retained by consumers under a load-based system." *Ibid*. The allowance rents are retained by consumers under a load-based system insofar as the wholesale market is unaffected by the load-based system. As noted by NRDC: "The load-based approach is the best approach for minimizing total costs to end users [because] generators in a load-based approach have no opportunity to include the value of allowances in their bid prices…." NRDC Opening Comment at 23.[2]

Having recognized that allowance rents will be "retained by consumers" under a load-based approach, the MSC attempts to argue that allowance rents will also be returned to consumers under a source-based approach. The MSC can make this claim only by making an additional assumption. The MSC contends that under a source-based approach "allowance rents" would be returned to consumers "if allowances are given to load, and then sold to generators (perhaps via an auction) for use in a source-based system…." *Ibid*.

The MSC's reasoning is invalid. The MSC manages to claim that the load-based system and the source-based system have equivalent outcomes for consumers only by making an

[2] The MSC also observes that the implementation of a GHG trading system would result in the creation of "rents of clean generation" and that these rents would be retained by generation owners and both source-based and load-based systems. "LSEs will pay more for electricity from cleaner generators, because that generation is more effective in helping the LSEs meet their emissions constraint." *Ibid*. However, the wholesale market may not be affected to a significant extent by the "rents of clean generation." The MSC observes that "within California, a significant fraction of this generation is owned by utilities, so any additional profits to those plants shall be returned to consumers." *Ibid.*

additional assumption that "allowances [would be] given to load and then sold to generators (perhaps via an auction) if a source-based system were adopted." The MSC's argument is like contending that a seven-foot basketball player and a five-foot basketball player will be equivalent in playing basketball if it were assumed that the five-foot player has the benefit of two-foot long leg extensions.

In fact, the "internalization" of allowance rents in the wholesale price of electricity as would occur under both the source-based approach and the first-seller approach would result in higher wholesale prices for electricity as recognized by various parties including NRDC. By contrast, avoiding the impact of allowance rents on wholesale electricity prices would be an *inherent* benefit of adopting the load-based approach.

Not only would some administrative allowance allocation methodology need to be assumed in order to ameliorate the adverse impact that the source-based approach or a first-seller approach would have on wholesale electricity market. The remedy that would be achieved would be less than perfect and potentially unfair. The MSC recognizes that if allowances were "given to load, and then sold to generators (perhaps via an auction) for use in a source-based system," the wholesale price increases that would result would be offset only "to some extent" by the administrative allocation of allowances to load. MSC Opinion at 5.

Additionally, the wholesale price increases that would result from adoption of a source-based approach could be offset much more for the consumers of some utilities than for others. For example, allocating allowances among retail providers on the basis of retail sales as advocated by PG&E would result in a grossly unjust wealth transfer from the consumers of some utilities to the consumers of other utilities. *See* SCPPA Supplemental Comment on Allowance Allocation Issues at 2-9 (November 14, 2007).

F. The MSC's Contention that the Load-Based Approach Is Inferior to the Source-Based Approach Because It Would Result in "Contract-Shuffling" Ignores both the Current Situation and the Leakage that Could Occur Under a Source-Based Approach.

The MSC criticizes the load-based approach on the basis that it could result in contract shuffling: "Although firms would not be able to avoid compliance by physically moving their sources of production out of the State ("leakage"), they would be able achieve much the same ends by 'reshuffling' their purchases of imported energy to originate from clean sources." MSC Opinion at 2 (footnote omitted). In making this criticism, the MSC ignores key facts.

First, the MSC ignores the fact that the CARB is in the process of adopting mandatory reporting rules that effectively curb "contract shuffling" from carbon intensive resources to zero-emission nuclear and large hydroelectric resources. CARB Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions (Oct. 19, 2007).

Second, as recognized in various December 3, 2007 opening comments, "contract shuffling" is rapidly disappearing as an issue. Other western states are focusing on the need for effective GHG regulation. As a result, the other western states are becoming increasingly reluctant to allow the low emission resources that are located outside of California to be redirected to serving California retail providers. "[As] indicated by the Western Climate Initiative WCI other states in the west are also considering GHG regulations and have RPS Regulations, so other states will want to claim clean resources for themselves." NRDC Opening Comment at 9. *See also* Pacificorp Opening Comment at 14-15.

Third, the MSC ignores the fact that while the load-based approach may be exposed to contract-shuffling, a purely source-based approach would expose California to "leakage" in which generation would be shifted from in-state resources to out-of-state resources. A purely source-based approach to point of regulation cannot be claimed to be superior to a load-based

approach on the basis that there would be less "contract-shuffling" when a pure source-based approach could result in leakage that could dwarf any "contract-shuffling" that would result from the load-based approach.

G. The MSC's Standard of Success for a State-Level GHG Emissions Regulation Program is Erroneous.

The MSC believes that "a key measure of the success of any state-level GHG emissions regulation is the extent to which other states and jurisdictions adopted." MSC Opinion at 2. Emulation should *not* be the "key measure" for the success of California GHG regulatory program. The key measure of success should be the degree to which the program meets core principles or objectives from the program. As discussed in SCPPA's opening comment, the primary objectives for any California program should be attaining GHG reduction goals, fairness, and cost effectiveness. *See* SCPPA Opening Comment at 12-13. As the Market Advisory Committee ("MAC") correctly observed, a state-level GHG program "must be *fair* and *cost effective* while bringing about *real emissions reductions*." MAC Report at 11 (emphasis added).

Furthermore, the MSC appears to assume that other states will be inclined to follow either a purely source-based approach or a first-seller approach in preference to a load-based approach to point of regulation. That assumption is erroneous. Oregon, for example, has been pursuing implementation of a regulatory program that would be based upon the load-based approach to point of regulation. Summary of the Median Proposal for an Oregon Carbon Allocation Standard, (Dec. 15, 2006).

Additionally, even if California were to adopt a load-based approach and other western states decided to take a different course, California could still provide a model for others on program features such as allocating allowances on the basis of emissions and permitting flexible

compliance mechanisms such as banking, borrowing, and offsets even if a trading feature were not adopted.

H. The MSC Attack on the Load-Based Approach Is a Result-Oriented Exercise that Should Be Given No Weight.

The MSC's Opinion is so replete with obvious errors and manipulated assumptions that it appears to be a result-oriented assessment that was driven by a pre-ordained desire to find the load-based approach to be deficient. Although the MSC Opinion may fit the needs of one or more investor owned utilities that, for the benefit of their shareholders, seek to ensure that the utilities avoid the potential risk of being designated as the points of regulation for a California GHG regulatory scheme, the MSC Opinion does nothing to assist California to choose wisely from among a load-based approach, a source-based approach, or a first-seller approach to establishing a GHG point of regulation.

III. PG&E'S OBJECTIONS TO THE LOAD-BASED APPROACH ARE NOT COMPELLING.

PG&E continues to support the "first-seller" approach to point of regulation. PG&E Opening Comment at 14, 28, 40-41. "Under a multi-sector, California only cap-and-trade system, PG&E supports a First Seller Approach." *Ibid* at 28. However, PG&E omits any discussion of a key fact about the first-seller approach: it would be preempted under federal law.

Given its continued support for the now-discredited first-seller approach and its continued opposition to the load-based approach, PG&E attempts to attack the critique of the first-seller approach in the Resero analysis of the first-seller approach that was attached as Attachment A to the POR Ruling. However, each of PG&E's arguments against points raised by Resero fails.

A. PG&E's Criticisms of the Resero Analysis of the First-Seller Approach.

PG&E presents several criticisms of points raised in the Resero analysis of the first-seller approach. PG&E Opening Comment at 16. PG&E's criticisms are not well-founded. For example, PG&E mischaracterizes points made by Resero and then addresses the mischaracterization. PG&E's criticisms of the Resero paper are as follows:

- **"The Resero paper is factually and logically incorrect in stating that First Seller is more complex than the Load-Based Cap simply because there are fewer LSEs than First Sellers."**

In fact, the group of retail providers that would be subject to GHG regulation under the load-based approach are much smaller than group of first-sellers. As Pacificorp points out, less than 70 California entities would be regulated under the load-based approach. Pacificorp Opening Comment at 22. Although PG&E contends that importers of electricity to be regulated under the first-seller approach are "a finite set of entities," that "finite set" would be much larger than the maximum number of retail providers that would be subject to regulation under the load-based approach. Furthermore, Resero is correct in pointing out that there would be more change in the set of first sellers than in the much smaller set of retail providers that would be regulated under the load-based approach.

- **"The Resero paper erroneously finds that in-state generation emissions data would be managed in the same way under the First Seller and the Load-Based Cap approaches, thereby ignoring a huge complexity and defect in the Load-Based Cap."**

PG&E apparently believes that assigning default emissions levels to "in-state generation dispatch through the power pool or through unspecified contracts to LSEs" would introduce a "huge complexity" under the load-based approach. However, the use of default factors as proposed in the CARB's mandatory reporting rules would eliminate the "huge complexity" that is alleged by PG&E.

- **"The Resero paper correctly states that the First Seller approach works with CAISO markets and incorporates emissions costs into energy prices but fails to point out that the Load-Based Cap does not do so."**

The apparent implication of this criticism of the Resero paper is that incorporating "emissions costs into energy prices" as would occur under the first-seller approach is a positive feature of the first-seller approach. In fact, as discussed above, the internalization of emission costs and the wholesale energy prices is a paramount *negative* feature of the first-seller approach. Further, PG&E relies on the MSC Opinion to demonstrate that the load-based approach would jeopardize the MRTU day-ahead and real-time markets. The MSC opinion fails to support that proposition.

- **"The Resero paper mistakenly attributes complications with California's reporting and regulation of imported and unspecified power to the First Seller approach, ignoring the fact that these problems have nothing to do with the point of regulation and in fact are increased under a Load-Based Cap."**

In fact, Resero stated: "To the extent that reporting is broken down by specified and unspecified sources and regional average carbon contents are assigned to unspecified sources, assignment under a First-Seller approach may be no more cumbersome than under a Load-Based approach…." Resero at 8. The Resero paper treated the load-based approach and the first-seller approach even handedly.

- **"The Resero paper incorrectly finds that limitations on the use of e-tags hinders the use of the First Seller approach, when such e-tag limitations have nothing to do with the point of regulation at all. E-tags could be used as documentation to verify importing entities and amounts imported. E-tags will not be used to assign GHG emissions to imports. The point of regulation is irrelevant to this use of E-tags."**

The key point of the Resero paper regarding e-tags was that e-tags cannot be used to assign GHG emissions to imports. PG&E apparently agrees. PG&E Opening Comment at 21.

- **"The Resero paper is incorrect in concluding that use of unit specific contracts to define imports is a viable and preferred alternative to the tracking and reporting of unspecified imports by "first-seller" marketers."**

SCPPA finds no statements in the Resero paper that suggest that Resero argued that the use of unit-specific contracts would define imports as a viable and preferred alternative to the trace and reporting of unspecified imports by first sellers.

In summary, PG&E incorrectly represents much of the discussion in the Resero paper. It appears that PG&E attempts to discount the value of the Resero paper as a discussion piece in many cases because Resero's conclusions were not what PG&E would have preferred.

B. PG&E's Support for Deferral of a Cap-and-Trade System.

Although PG&E expresses continued support for the first-seller approach in opposition to the load-based approach, PG&E does express support for deferral of a cap-and-trade market structure if it becomes "more likely than not that a national source-based system will be adopted." PG&E Opening comment at 26. "Nonetheless, if it becomes more likely than not that a national source-based system will be adopted and implemented within the same general time period as AB 32, then there could be significant advantages and efficiencies in California deferring adoption of a cap-and-trade market structure in the short period prior to that national system." *Ibid* at 26. "Deferring adoption of a source based cap-and-trade program in California is more likely to facilitate California's integration into a subsequent federal program." *Ibid* at 27.

PG&E goes one step further to suggest that even if no national system is likely to be enacted within the time frame in which AB 32 is to be implemented, it may still be appropriate for California to defer implementing a cap-and-trade feature to integrate the west-wide program: "However, if no national system is likely to be enacted within the same time frame as AB 32, e.g. by 2012, then California may need to consider deferring the cap-and-trade component of the

AB 32 program until source-based GHG programs are in place elsewhere in Western regional power markets." *Ibid*. In advocating deferral as an alternative to its primary advocacy of the first-seller approach, PG&E tends to reflect the thinking of various other parties that submitted opening comments.

IV. CONCLUSION

SCPPA continues to support a GHG regulatory program for the electric sector in which regulated retail providers would be the point of regulation and GHG emission allowances would be allocated to the retail providers for the benefit of the retail providers' customers, with the allocation of allowances being based upon recent pre-AB 32 actual experience emissions and with the amount of allowances that are allocated to each retail provider for each successive compliance period being reduced proportionately over time as necessary to achieve the AB 32 reduction goals as eventually established by the California Air Resources Board ("CARB") for the electric sector and for each retail provider by 2020. SCPPA also supports consideration of the "flexible compliance mechanisms" that were envisioned by the CPUC in Decision ("D.") 06-02-032, including allowance trading, banking, borrowing, and, to an appropriately limited extent, offsets, and SCPPA recommends consideration of a "safety valve" that would provide a check on

exorbitant allowance prices. However, with caveats as discussed below, SCPPA could also support each of the three options for deferring trading as presented in the POR Ruling.

Respectfully submitted,

/s/ Norman A. Pedersen

Norman A. Pedersen, Esq.
HANNA AND MORTON LLP
444 South Flower Street, Suite 1500
Los Angeles, California 90071-2916
Telephone: (213) 430-2510
Facsimile: (213) 623-3379
E-mail: *npedersen@hanmor.com*

Attorney for the **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY**

Dated: December 17, 2007

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY REPLY COMMENT ON POINT OF REGULATION ISSUES** on the service list for CPUC Docket No. R.06-04-009 and CEC Docket No. 07-OIIP-01 by serving a copy to each party by electronic mail and/or by mailing a properly addressed copy by first-class mail with postage prepaid.

Executed on December 17, 2007, at Los Angeles, California.

/s/ Sylvia Cantos

Sylvia Cantos

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abb@eslawfirm.com
abonds@thelen.com
achang@nrdc.org
adamb@greenlining.org
aeg@cpuc.ca.gov
agc@cpuc.ca.gov
agrimaldi@mckennalong.com
aimee.barnes@ecosecurities.com
ajkatz@mwe.com
akbar.jazayeri@sce.com
akelly@climatetrust.org
alan.comnes@nrgenergy.com
aldyn.hoekstra@paceglobal.com
alho@pge.com
amber@ethree.com
amsmith@sempra.com
andrew.bradford@constellation.com
andrew.mcallister@energycenter.org
andy.vanhorn@vhcenergy.com
anita.hart@swgas.com
annabelle.malins@fco.gov.uk
annette.gilliam@sce.com
apak@sempraglobal.com
arno@recurrentenergy.com
atrial@sempra.com
atrowbridge@daycartermurphy.com
Audra.Hartmann@Dynegy.com
aweller@sel.com
bbaker@summitblue.com
bbeebe@smud.org
bblevins@energy.state.ca.us
bcragg@goodinmacbride.com
bdicapo@caiso.com
bernardo@braunlegal.com
beth@beth411.com
Betty.Seto@kema.com
bill.chen@constellation.com
bill.schrand@swgas.com
bjeider@ci.burbank.ca.us
bjl@bry.com
bjones@mjbradley.com
bkc7@pge.com
blm@cpuc.ca.gov
bmcc@mccarthylaw.com
bmcquown@reliant.com
Bob.lucas@calobby.com
bpotts@foley.com
bpurewal@water.ca.gov
brabe@umich.edu
brbarkovich@earthlink.net
BRBc@pge.com
brenda.lemay@horizonwind.com
burtraw@rff.org
bushinskyj@pewclimate.org
C_Marnay@1b1.gov
cadams@covantaenergy.com
californiadockets@pacificorp.com
carla.peterman@gmail.com
carter@ieta.org
case.admin@sce.com
cathy.karlstad@sce.com
cbaskette@enernoc.com
cbreidenich@yahoo.com
cchen@ucsusa.org
cem@newsdata.com
cf1@cpuc.ca.gov
cft@cpuc.ca.gov
charlie.blair@delta-ee.com
chilen@sppc.com
cjw5@pge.com
ckmitchell1@sbcglobal.net
ckrupka@mwe.com
clarence.binninger@doj.ca.gov
clark.bernier@rlw.com
clyde.murley@comcast.net
cmkehrein@ems-ca.com
colin.petheram@att.com
cpe@cpuc.ca.gov
cpechman@powereconomics.com
cswoollums@midamerican.com
curt.barry@iwpnews.com
curtis.kebler@gs.com
Cynthia.A.Fonner@constellation.com
cynthia.schultz@pacificorp.com
daking@sempra.com
Dan.adler@calcef.org
danskopec@gmail.com
dansvec@hdo.net
dave@ppallc.com
david.zonana@doj.ca.gov
david@branchcomb.com
david@nemtzow.com

davidreynolds@ncpa.com
dbrooks@nevp.com
deb@a-klaw.com
deborah.slon@doj.ca.gov
dehling@klng.com
Denise_Hill@transalta.com
derek@climateregistry.org
dhecht@sempratrading.com
dhuard@manatt.com
diane_fellman@fpl.com
dietrichlaw2@earthlink.net
dil@cpuc.ca.gov
dkk@eslawfirm.com
dks@cpuc.ca.gov
dmacmll@water.ca.gov
dmetz@energy.state.ca.us
dniehaus@semprautilities.com
douglass@energyattorney.com
dseperas@calpine.com
dsh@cpuc.ca.gov
dsoyars@sppc.com
dtibbs@aes4u.com
dwang@nrdc.org
dwood8@cox.net
dws@r-c-s-inc.com
echiang@elementmarkets.com
edm@cpuc.ca.gov
egw@a-klaw.com
ehadley@reupower.com
ej_wright@oxy.com
ek@a-klaw.com
ekgrubaugh@iid.com
ELL5@pge.com
elvine@lbl.gov
emahlon@ecoact.org
emello@sppc.com
epoole@adplaw.com
epowers@arb.ca.gov
e-recipient@caiso.com
etiedemann@kmtg.com
ewolfe@resero.com
ez@pointcarbon.com
farrokh.albuyeh@oati.net
fiji.george@elpaso.com
filings@a-klaw.com
fjs@cpuc.ca.gov
fluchetti@ndep.nv.gov
fstern@summitblue.com
fwmonier@tid.org
gbarch@knowledgeinenergy.com
gblue@enxco.com
george.hopley@barcap.com
ghinners@reliant.com
GloriaB@anzaelectric.org
glw@eslawfirm.com
gmorris@emf.net
gpickering@navigantconsulting.com
gregory.koiser@constellation.com
grosenblum@caiso.com
gsmith@adamsbroadwell.com
gxl2@pge.com
harveyederpspc.org@hotmail.com
hayley@turn.org
hcronin@water.ca.gov
hgolub@nixonpeabody.com
hoerner@redefiningprogress.org
hs1@cpuc.ca.gov
hurlock@water.ca.gov
HYao@SempraUtilities.com
hym@cpuc.ca.gov
info@calseia.org
jack.burke@energycenter.org
james.keating@bp.com
janill.richards@doj.ca.gov
jarmstrong@goodinmacbride.com
jason.dubchak@niskags.com
jbf@cpuc.ca.gov
jbw@slwplc.com
jchamberlin@strategicenergy.com
jci@cpuc.ca.gov
JDF1@PGE.COM
jdh@eslawfirm.com
jdoll@arb.ca.gov
jeanne.sole@sfgov.org
jeffgray@dwt.com
jen@cnt.org
jenine.schenk@apses.com
jennifer.porter@energycenter.org
JerryL@abag.ca.gov
jesus.arredondo@nrgenergy.com
jf2@cpuc.ca.gov
jgill@caiso.com
jgreco@caithnessenergy.com
jhahn@covantaenergy.com
jimross@r-c-s-inc.com
jj.prucnal@swgas.com
jjensen@kirkwood.com
jk1@cpuc.ca.gov
jkarp@winston.com
jkloberdanz@semprautilities.com

jlaun@apogee.net
jleslie@luce.com
jluckhardt@downeybrand.com
jm3@cpuc.ca.gov
jnm@cpuc.ca.gov
jody_london_consulting@earthlink.net
Joe.paul@dynegy.com
john.hughes@sce.com
johnrredding@earthlink.net
jol@cpuc.ca.gov
josephhenri@hotmail.com
joyw@mid.org
jsanders@caiso.com
jscancarelli@flk.com
jsqueri@gmssr.com
jst@cpuc.ca.gov
jtp@cpuc.ca.gov
julie.martin@bp.com
jwiedman@goodinmacbride.com
jwmctarnaghan@duanemorris.com
jxa2@pge.com
karen@klindh.com
karla.dailey@cityofpaloalto.org
Kathryn.Wig@nrgenergy.com
kbowen@winston.com
kcolburn@symbioticstrategies.com
kdusel@navigantconsulting.com
kdw@woodruff-expert-services.com
keith.mccrea@sablaw.com
kellie.smith@sen.ca.gov
kelly.barr@srpnet.com
ken.alex@doj.ca.gov
ken.alex@doj.ca.gov
kenneth.swain@navigantconsulting.com
kerry.hattevik@mirant.com
kevin.boudreaux@calpine.com
kfox@wsgr.com
kgough@calpine.com
kgrenfell@nrdc.org
kgriffin@energy.state.ca.us
kjinnovation@earthlink.net
kjsimonsen@ems-ca.com
kkhoja@thelenreid.com
klatt@energyattorney.com
kmills@cfbf.com
kmkiener@fox.net
kowalewskia@calpine.com
krd@cpuc.ca.gov
kyle.l.davis@pacificorp.com
kyle.silon@ecosecurities.com
kyle_boudreaux@fpl.com
lars@resource-solutions.org
Laura.Genao@sce.com
lcottle@winston.com
ldecarlo@energy.state.ca.us
leilani.johnson@ladwp.com
liddell@energyattorney.com
lisa.c.schwartz@state.or.us
lisa_weinzimer@platts.com
llorenz@semprautilities.com
llund@commerceenergy.com
lmh@eslawfirm.com
Lorraine.Paskett@ladwp.com
lpark@navigantconsulting.com
lrdevanna-rf@cleanenergysystems.com
lrm@cpuc.ca.gov
lschavrien@semprautilities.com
ltenhope@energy.state.ca.us
ltt@cpuc.ca.gov
marcel@turn.org
marcie.milner@shell.com
mary.lynch@constellation.com
mclaughlin@braunlegal.com
mdjoseph@adamsbroadwell.com
mflorio@turn.org
mgarcia@arb.ca.gov
mhyams@sfwater.org
Mike@alpinenaturalgas.com
mjd@cpuc.ca.gov
mmattes@nossaman.com
mmazur@3phasesRenewables.com
monica.schwebs@bingham.com
mpa@a-klaw.com
mpryor@energy.state.ca.us
mrw@mrwassoc.com
mscheibl@arb.ca.gov
mwaugh@arb.ca.gov
nenbar@energy-insights.com
ner@cpuc.ca.gov
nes@a-klaw.com
nlenssen@energy-insights.com
norman.furuta@navy.mil
notice@psrec.coop
npedersen@hanmor.com
nsuetake@turn.org
nwhang@manatt.com
obartho@smud.org
obystrom@cera.com
ofoote@hkcf-law.com
pbarthol@energy.state.ca.us

pburmich@arb.ca.gov
pduvair@energy.state.ca.us
pepper@cleanpowermarkets.com
phanschen@mofo.com
Philip.H.Carver@state.or.us
philm@scdenergy.com
pjazayeri@stroock.com
ppettingill@caiso.com
pseby@mckennalong.com
psp@cpuc.ca.gov
pssed@adelphia.net
pstoner@lgc.org
pthompson@summitblue.com
pvallen@thelen.com
Pw1@cpuc.ca.gov
pzs@cpuc.ca.gov
rachel@ceert.org
ralph.dennis@constellation.com
ram@cpuc.ca.gov
randy.howard@ladwp.com
randy.sable@swgas.com
rapcowart@aol.com
rhelgeson@scppa.org
RHHJ@pge.com
rhwiser@lbl.gov
richards@mid.org
rick_noger@praxair.com
rita@ritanortonconsulting.com
rkeen@manatt.com
rkmoore@gswater.com
rmccann@umich.edu
rmiller@energy.state.ca.us
rmm@cpuc.ca.gov
rmorillo@ci.burbank.ca.us
robert.pettinato@ladwp.com
Robert.Rozanski@ladwp.com
roger.montgomery@swgas.com
roger.pelote@williams.com
rogerv@mid.org
ron.deaton@ladwp.com
rprince@semprautilities.com
rreinhard@mofo.com
rrtaylor@srpnet.com
rsa@a-klaw.com
rschmidt@bartlewells.com
rsmutny-jones@caiso.com
rwinthrop@pilotpowergroup.com
ryan.flynn@pacificorp.com
S1L7@pge.com
saeed.farrokhpay@ferc.gov
samuel.r.sadler@state.or.us
sandra.carolina@swgas.com
Sandra.ely@state.nm.us
sas@a-klaw.com
sasteriadis@apx.com
sbeatty@cwclaw.com
sberlin@mccarthylaw.com
sbeserra@sbcglobal.net
scarter@nrdc.org
scohn@smud.org
scott.tomashefsky@ncpa.com
scottanders@sandiego.edu
scr@cpuc.ca.gov
sdhilton@stoel.com
sellis@fypower.org
sendo@ci.pasadena.ca.us
sephra.ninow@energycenter.org
sgm@cpuc.ca.gov
slins@ci.glendale.ca.us
sls@a-klaw.com
smichel@westernresources.org
smindel@knowledgeinenergy.com
smk@cpuc.ca.gov
snewsom@semprautilities.com
spauker@wsgr.com
sscb@pge.com
ssmyers@att.net
steve.koerner@elpaso.com
steve@schiller.com
stevek@kromer.com
steven.huhman@morganstanley.com
steven.schleimer@barclayscapital.com
steven@iepa.com
steven@lipmanconsulting.com
steven@moss.net
svn@cpuc.ca.gov
svongdeuane@semprasolutions.com
svs6@pge.com
tam@cpuc.ca.gov
tburke@sfwater.org
tcarlson@reliant.com
tcx@cpuc.ca.gov
tdarton@pilotpowergroup.com
tdillard@sierrapacific.com
THAMILTON5@CHARTER.NET
thunt@cecmail.org
tiffany.rau@bp.com
tim.hemig@nrgenergy.com
todil@mckennalong.com
Tom.Elgie@powerex.com

tomb@crossborderenergy.com
tomk@mid.org
trdill@westernhubs.com
troberts@sempra.com
UHelman@caiso.com
vb@pointcarbon.com
vitaly.lee@aes.com
vjw3@pge.com
vprabhakaran@goodinmacbride.com
vwelch@environmentaldefense.org
wbooth@booth-law.com
westgas@aol.com
william.tomlinson@elpaso.com
wsm@cpuc.ca.gov
wtasat@arb.ca.gov
www@eslawfirm.com
wynne@braunlegal.com
ygross@sempraglobal.com
zaiontj@bp.com